



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/069,526	03/06/2002	Tomoka Morita	P22007	4567
7055	7590	09/07/2006	EXAMINER	
GREENBLUM & BERNSTEIN, P.L.C. 1950 ROLAND CLARKE PLACE RESTON, VA 20191			NGUYEN, JIMMY H	
			ART UNIT	PAPER NUMBER
			2629	

DATE MAILED: 09/07/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/069,526	Applicant(s) MORITA ET AL.	
	Examiner Jimmy H. Nguyen	Art Unit 2629	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 August 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) 3-7, 10-14 and 17-21 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 2, 8, 9, 15 and 16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This Office Action is made in response to applicant's amendment after final filed on 08/15/2006. Claims 1-21 are currently pending in the application. An action follows below:
2. Since this application is eligible for the transitional procedure of 37 CFR 1.129(a), and the fee set forth in 37 CFR 1.17(r) has been timely paid, the finality of the previous Office action is hereby withdrawn pursuant to 37 CFR 1.129(a). Applicant's first submission after final filed on 08/15/2006 has been entered.

Allowable Subject Matter

3. The indicated allowability of claims 1-21 is withdrawn in view of the newly discovered reference(s) to Kawahara (US 7,071,902 B1). Rejections based on the newly cited reference(s) follow.
4. It is noted to Applicants that since generic claims 1, 8 and 15 are no longer allowable, claims 3-7, 10-14, and 17-21, directed to nonelected species (II-VI) are withdrawn from consideration.
5. Claims 3-7, 10-14, and 17-21 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to nonelected species (II-VI), there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the reply filed on 08/01/2005. Claims 1, 2, 8, 9, 15 and 16 are considered as follows:

Claim Objections

6. Claims 1 and 15 are objected to because of the following informalities: "levels:" in line 5 should be changed to -- levels; -- because of a typo. Appropriate correction is required.

Claim Rejections - 35 USC § 102

Art Unit: 2629

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

8. Claims 1, 2, 8, 9, 15 and 16 are rejected under 35 U.S.C. 102(e) as being anticipated by Kawahara (US 7,071,902 B1).

The applied reference has a common assignee with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention “by another,” or by an appropriate showing under 37 CFR 1.131.

As to claims 1, 8 and 15, Kawahara discloses a plasma display panel device (see Fig. 1) and an associate method for providing a gray scale display by controlling in accordance with an input video signal individual pixels on a display panel so that each pixel emits light or does not

Art Unit: 2629

emit light in individual sub-fields that are defined by dividing one field and arranged on a time base in a prescribed order, said sub-fields being weighted to represent gray levels; wherein said plurality of sub-fields are weighted in such a way that at least one non-display gray level (e.g., non-display gray levels "4", "9" and "14", see Fig. 2, col. 8, line 60 through col. 9, line 36) which cannot be displayed by combining said plurality of sub-fields is arranged between displayable gray levels by combining said plurality of sub-fields (see Fig. 6, col. 10, lines 34-50), and wherein said display device comprises a diffuser circuit (a circuit including elements 2-7 and 11-13 all shown in Fig. 1) that receives said video signal for, when said video signal represents said non-display gray level, diffusing spatially a difference between said non-display gray level and one of said display gray levels so that said non-display gray level can be equivalently displayed with said display gray levels (see Figs. 1, 2 and 6, col. 13, lines 1-24, col. 14, lines 43-47); a sub-field corresponder (a sub-field control circuit 8, see Fig. 1) that converts a video signal representing one field output from said diffuser into a video signal representing individual sub-fields (see Fig. 5, col. 10, lines 1-33); and an emitter (a display control circuit 9, Fig. 1) that controls said pixels on said display panel so that each pixel emits light or does not emit light in said individual sub-fields, in accordance with said video signal representing said individual sub-fields output from said sub-field corresponder (Fig. 8, col. 11, lines 36-67). Accordingly, the limitations of these claims are read in the Kawahara reference.

As to claims 2, Kawahara also teaches the diffusing circuit (2-7, 11-13) including a gray level converter (a circuit including elements 4-7, see Fig. 1) that converts said non-display gray level into one of said display gray levels that is close to said non-display gray level (see col. 8, line 35 through col. 9, line 36) and an error diffusing circuit (a circuit including elements 3 and

Art Unit: 2629

11-13, see Fig. 1) that diffuses, when said non-display gray level is converted into said one of said display gray levels by said gray level converter, a difference between said non-display gray level and said one of said display gray levels to pixels around a pixel having said non-display gray level (see col. 13, lines 1-24 and col. 14, lines 43-50). Accordingly, the limitations of these claims are read in the Kawahara reference.


Conclusion

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jimmy H. Nguyen whose telephone number is 571-272-7675. The examiner can normally be reached on Monday - Thursday, 8:00 a.m. - 5:00 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bipin Shalwala can be reached at 571-272-7681. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JHN
September 5, 2006



Jimmy H. Nguyen
Primary Examiner
Technology Division: 2629